

Wednesday, 21/05/2008 8:51:53 AM
Linda Lacelle

Process Sheet

Customer :	CU-DAR001 Dart Helicopters Services	Drawing Name :	OUTBOARD WINDOW DOUBLER
Job Number :	38831	Part Number :	D37003
Estimate Number :	13148	Drawing Number :	D3700 PRELIM FOR ENGINEERING USE ONLY
P.O. Number :		Project Number :	N/A
This Issue :	21/05/2008 S.O. No. :	Drawing Revision :	PRELIM
Prsht Rev. :	NC	Material :	
First Issue :	28/04/2008 Type :	Due Date :	05/05/2008 Qty: 1 Um: Each
Previous Run :	37134		
Written By :			
Checked & Approved By :			
Comment :	Est Rev: A 08-01-30 new issue DD verified by: EC		

Additional Product

PROTOTYPE PRELIMINARY ISSUE

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M6061T6S080	6061-T6 .080 Sheet
-----	-------------	--------------------



Comment: Qty.: 0.2006 sf(s)/Unit Total : 0.2006 sf(s)

6061T6 aluminium sheet .080" thick

(M6061T6S080)

Batch: 107276 ~~108-5-1~~

First ass scraped

6061T6 5.000" thick

M104186

Make new part by hand

108-05-22

2.0	WATER JET	FLOW WATER JET
-----	-----------	----------------



Comment: FLOW WATER JET

1-Cut as per Dwg D3700

Dwg Rev: PREL

Prog Rev: PREL

108-5-1

①

2- Deburr if necessary

108-5-1

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

108-5-1

4.0	QC8	SECOND CHECK
-----	-----	--------------



Comment: SECOND CHECK

ENGINEERING APPROVAL

108-05-19

5.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
-----	-----------------	----------------------------



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

Not required

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: OUTBOARD WINDOW DOUBLER

Job Number: 38831

Part Number: D37003

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

not required

7.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

08.05.21

8.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08.05.21 Prototype

Job Completion



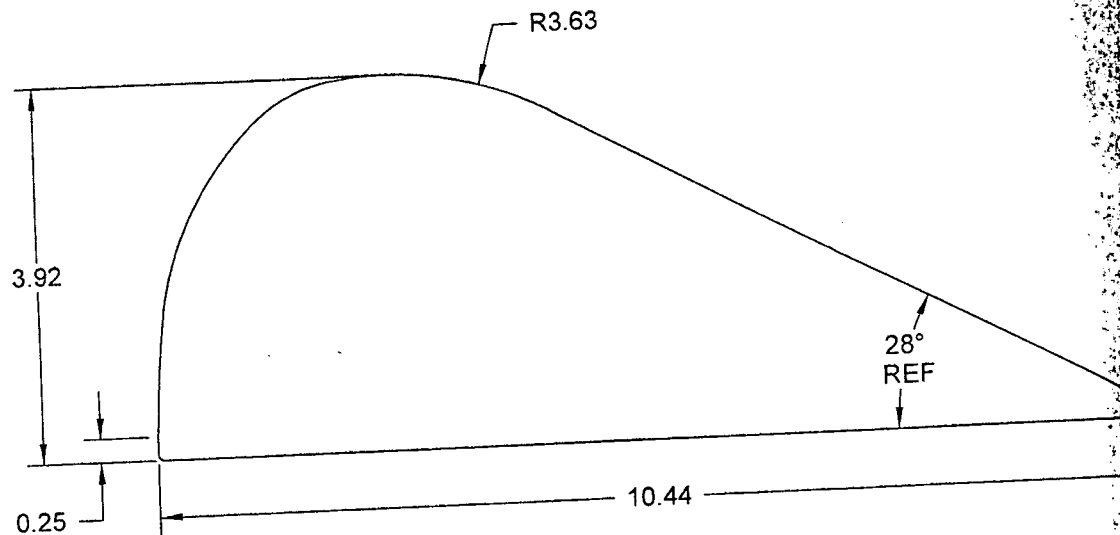
MF 08-06-13

PART WAS NOT ADEQUATE.

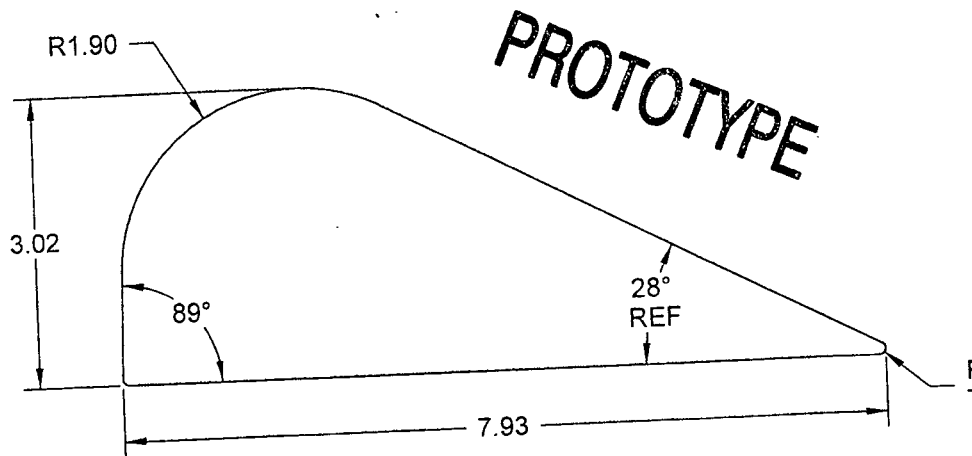
MAKE PART AND REVERSE ENGINEER DWH.

ATTACH NEW DWH ON W/O.

08.05.20



D3700-1 INBOARD WINDOW DOUBLER



D3700-3 OUTBOARD WINDOW DOUBLER

WAS
108.0520

8 7 6 5 4 3 2 1

D

D

C

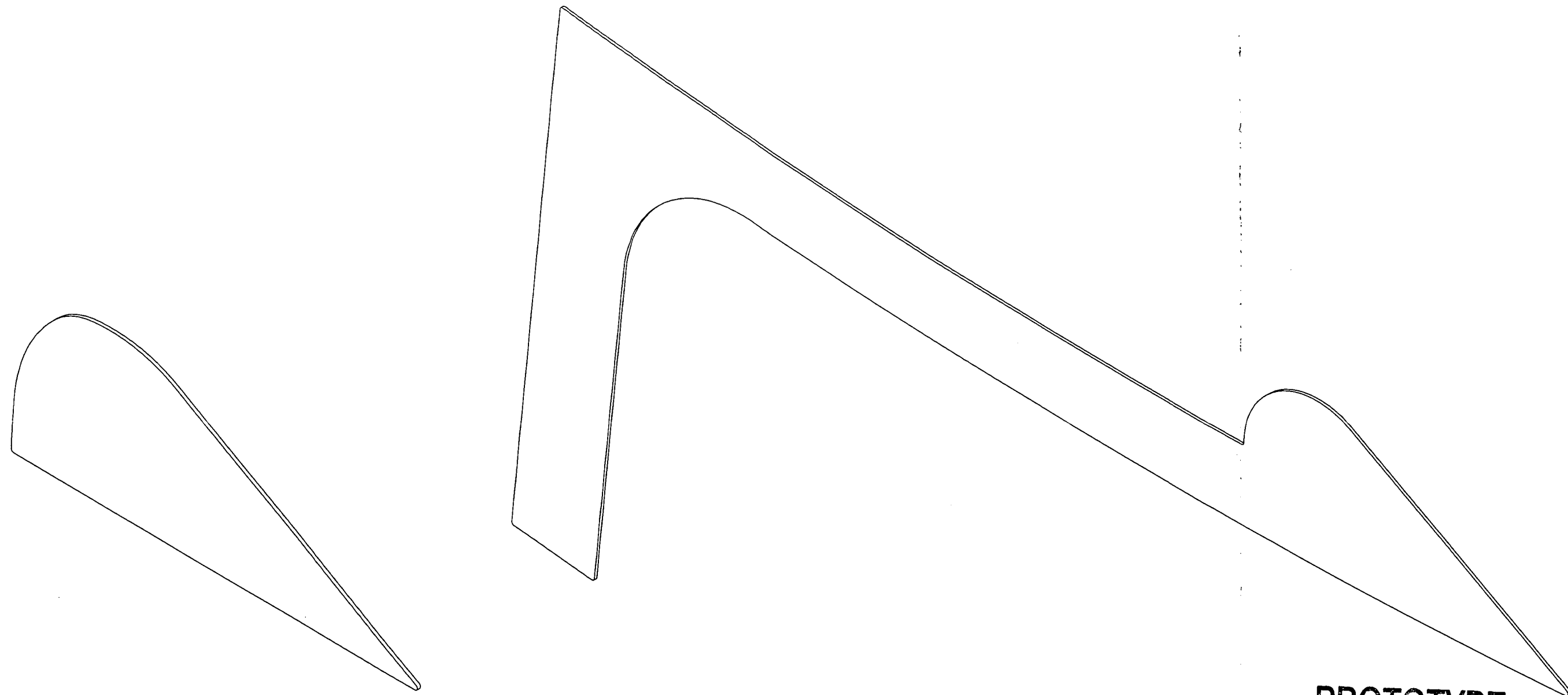
C

B

B

A

A



D3700-1 INBOARD WINDOW DOUBLER

D3700-3 OUTBOARD WINDOW DOUBLER

PROTOTYPE

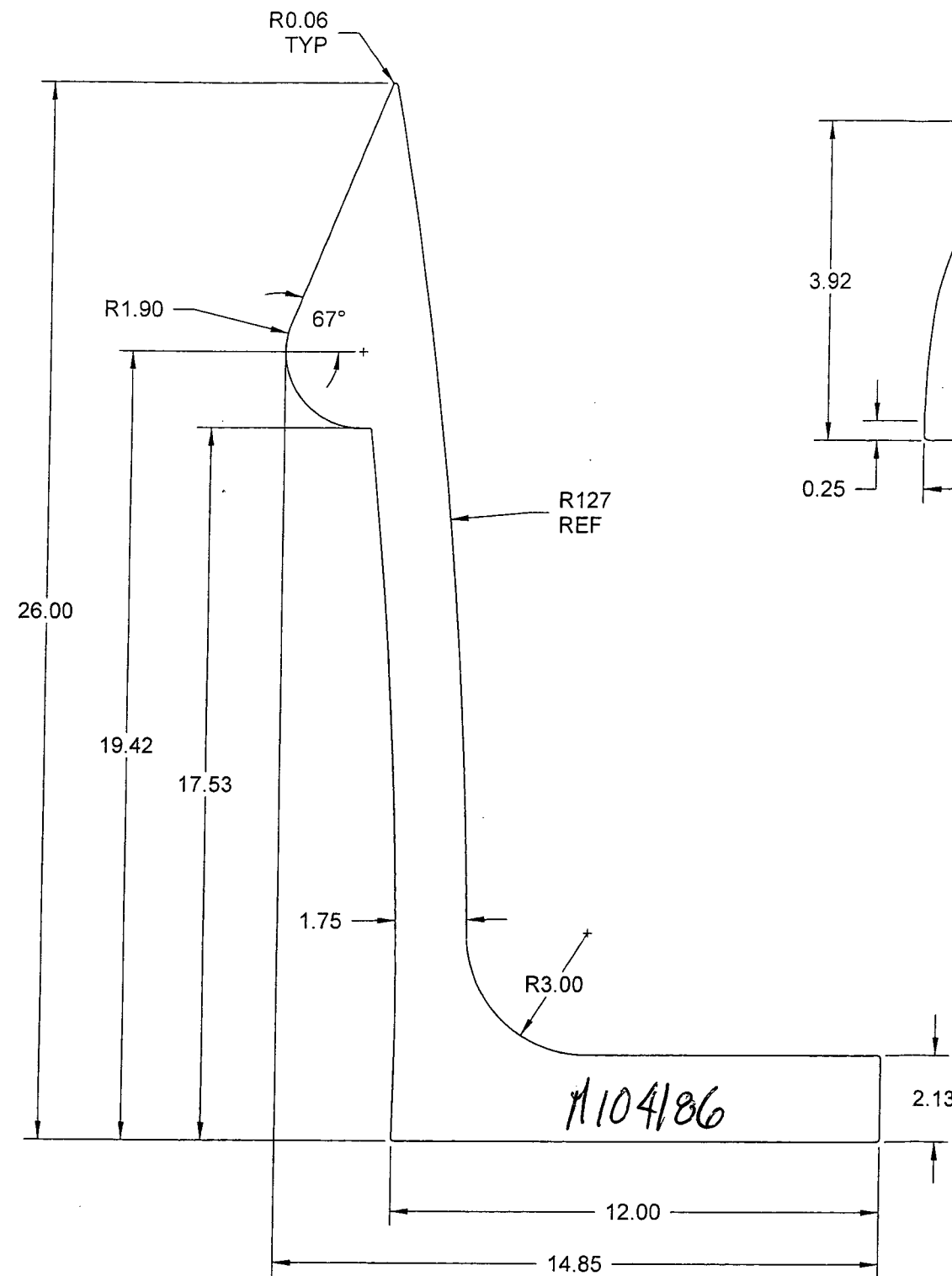
~~PRELIMINARY ISSUE~~
08.05.20

NOTES:

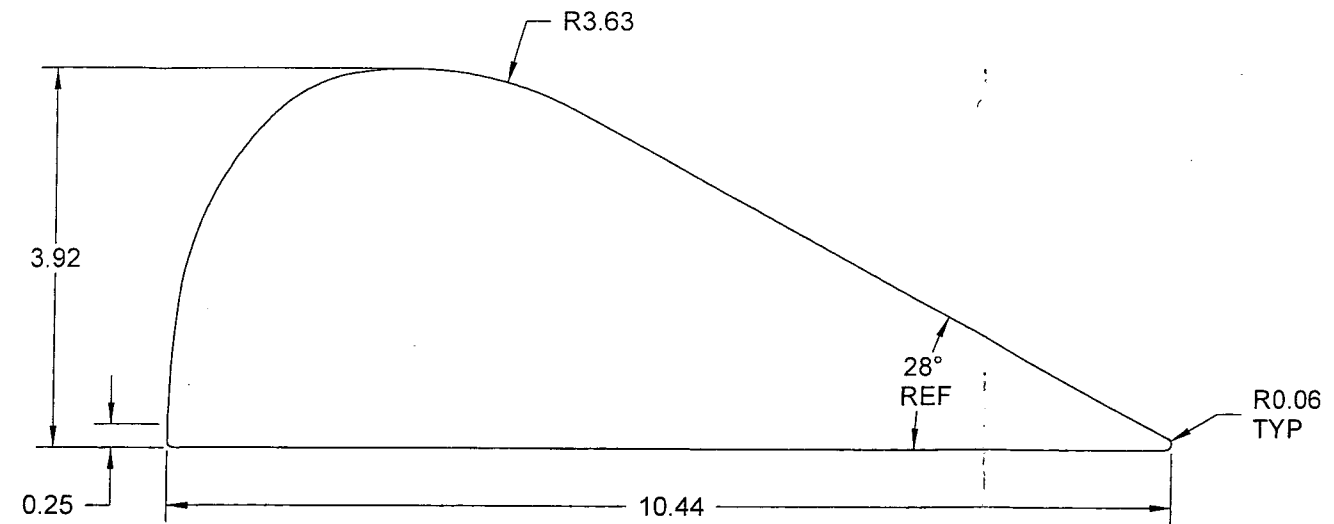
- 1) MATERIAL: 6061-T6 (OR 6061-T62) ALUMINUM SHEET, 0.080 THICK
PER AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027
(REF. DART SPEC. M6061T6S.080)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3700-X" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: D3700-1 = 0.20 lbs
D3700-3 = 0.45 lbs

A	NEW ISSUE	MB	08.01.29
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3700	SHEET 1 OF 2
APPROVED		TITLE	SCALE
DE APPR.		WINDOW DOUBLER	NTS
DATE	08.01.29	COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8 7 6 5 4 3 2 1



D3700-3 OUTBOARD WINDOW DOUBLER



D3700-1 INBOARD WINDOW DOUBLER

PROTOTYPE

REVERSED ENGR. ON
ACTUAL PART MANUFACTURED
FOR BETTER FIT. 1/08.05.20

PRELIMINARY ISSUE
1/08.05.20

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3700	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.		WINDOW DOUBLER	NTS
DATE	08.01.29	<small>COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

Receiving Report

Date: 07/04/20

Batch No: 17104186

Supplier: Magna

Dart P/O: 3581

Packing Slip: Yes / No /
 Invoice: Yes / No /
 Receipt: Cash / Cr /

Release Note Attached: Yes / No / N/A /
 Waybill Attached: Yes / No / N/A /
 Shipment Complete: Yes / No / N/A /
 QC6 Inspection / N/A /
 Work Order / N/A /

Discrepancies

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments
	6061-T6 Alum	40	0	0	40	
	Flat 3/4x3					

Initials of receiver (if shipment OK) Level 12 PS

Production/Admin:

Date

Received/Costing

Initial

07/04/26

R/P 4421 + 4417

CS

Location /

H:\FORMS\Purchasing\approved purch\RECREPORT Rev D

Sub-Total
 G.S.T.

468.00
 28.00

TOTAL →

496.00

FRAIS D'ADMINISTRATION DE 1½% PAR MOIS (18% PAR ANNÉE) SUR COMPTE PASSÉ DÙ.
 LE PRÉSENT CONTRAT SERA RÉGI PAR LES LOIS DE LA PROVINCE DE QUÉBEC ET COMME
 AYANT PRIS NAISSANCE DANS LE DISTRICT JUDICIAIRE DE MONTRÉAL.
 ADMINISTRATION CHARGES OF 1½% PER MONTH (18% PER YEAR) ON OVERDUE ACCOUNTS.
 THE PRESENT AGREEMENT SHOULD BE GOVERNED BY THE QUEBEC LEGISLATION AND SHOULD
 BE CONSIDERED AS HAVING ORIGINATED IN THE JUDICIAL DISTRICT OF MONTREAL.



MAGNA STAINLESS & ALUMINIUM
525 MELOCHE AVE.
DORVAL, QUEBEC H9P 2W2
(514) 631-1211 FAX: (514) 631-0013

COMM
SALES

0147

VENDU À /
SOLD TO:

LIVRÉ À /
SHIP TO:

INSTRUCTIONS SPÉCIALES / SPECIAL INSTRU

DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY
ONTARIO

K6A 1K7

COMMANDE SALES ORDER		CODE DE CLIENT CUSTOMER CODE		BON D'ACHAT DU CLIENT CUSTOMER PURCHASE ORDER		N° DE TÉLÉPHONE DU CLIENT CUSTOMER TELEPHONE NUMBER		N° DE TÉLÉCOPIEUR DU CLIENT CUSTOMER FAX NO.					
0147704		DART		3581		613 632-5200		632-4443					
LIVRÉ VIA - SHIP VIA		CONDITIONS - TERMS		DATE COMMANDE DATE ORDERED		DATE REQUISE DATE REQUIRED		DATE LIVRÉE DATE DELIVERED					
OUR TRUCK		NET 30		Apr-19-07		Apr-25-07		15 20					
CONTROLE DE QUALITE DU CLIENT REQUIS CUSTOMER QUALITY RELEASE REQ'D <input type="checkbox"/>					CONTROLE DE QUALITE DE MAGNA REQUIS MAGNA QUALITY RELEASE REQ'D <input type="checkbox"/>					PREPAYS PREPAID <input type="checkbox"/>		A PERCEVOIR COLLECT <input type="checkbox"/>	
QUALITE - QUALITY		UNITE UNIT	N° DE COULEE HEAT NUMBER	DESCRIPTION		QTE LIVREE QTY SHIPPED	PRIX PAR PRICE PER		INSTRUCTIONS PLANT INSTRUCTIONS				
2 pc	2	pcs	10073	6061-T6 .080 X 48 X 144		110#			2 pcs				
			M 104/80	Epos/04/17									
			M 6061 T6 5080										
				TOTAL :					110 LB				

MTR-AVEC COMMANDE
MTR'S-WITH ORDER ☐

POSTE
MAIL ☐

TÉLÉCOPIEUR
FAX ☐

**PACKING SLIP / BON D'EMBALLAGE

20070419

N° DE COULEE ÉTAMPER SUR LE CÔTÉ
HEAT NO. STAMP ONE END ☐

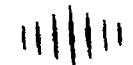
ÉTAT PAR / MATERIAL RECEIVED IN GOOD CONDITIONS BY: _____

Novelis Deutschland GmbH, Werk Nachterstedt
Novelis Automotive, Painted & Specialities

Gaterslebener Straße 1
D-06469 Nachterstedt

Postfach 13 45
D-06433 Ascherleben

Tel.: (03 47 41) 77-0
Fax: (03 47 41) 204
www.novelis.com

47525

Novelis

Abnahmeprüfzeugnis
Inspection Certificate
Certificat de Reception

EN 10204-3.1
EN 10204-3.1
EN 10204-3.1

Nr./No. 81363840-A

Standard
ASME SB209 (1995)

Auftrag Nr. Order no No de commande	0000080353	Werkstoff Alloy Alliage	6061	Zustand Temper Etat	T6	ER-3249-P R118474 E1
Gewicht, netto Weight, net Poids net	14.683 lbs	Stückzahl Pieces Pièces	4 COLLI	AL-PLATE SHEETS / COMMERCIAL QUALITY		

Chemische Zusammensetzung in Gewichtsprozenten
Chemical composition in percentage by weight
Composition chimique en pourcentage de poids

Chem.-Nr./Cast no./No de coulée	Band-Nr	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
100 100373 ★	05/82751	0,50	0,38	0,27	0,06	0,92	0,07	0,01	0,01

Mechanische Eigenschaften
Mechanical properties
Caractéristiques mécaniques

Pos	Coll	Band-Nr	Abmessung Dimension Dimension	Prüfrichtung Direction of testing sens de mesure	0,2% Dehnungs- proof stress limite d'élasticité R _{0,2} MPa	Zugfestigkeit Tensile strength Résistance à la traction R _m MPa	Dehnung Elongation Allongement A50 %	Zuglot Earing Corne %
20	2116002 2116003 2116004 2116005	8275100001 8275100002 8275100003 8275100004	2,032 * 1289,20 * 3657,60 mm .080148X144" ER-3249-P - R118474 -	Q Q Q Q	270 270 270 270	317 317 317 317	14 14 14 14	

This certificate has been made out by EDP and that's why it isn't signed.

sig. D. Kühne

Werkstoffverständiger
plant specialist

Nachterstedt, 21.11.05

Zertifiziert nach ISO 9001, ISO/TS 16949, ISO 14001, EMAS II, OHSAS 18001
Sitz: Göttingen (HRB 772), Geschäftsführung: Nikolaus Fritze, von Verschuer, Erwin Faust

Receiving Report

Date: 07/04/20

Batch No: 2104186

Supplier: Magna

Dart P/O: 3581

Packing Slip: Yes / No /
 Invoice: Yes / No /
 Receipt: Cash / Cr /

Release Note Attached: Yes / No / N/A /
 Waybill Attached: Yes / No / N/A /
 Shipment Complete: Yes / No / N/A /
 QC6 Inspection: /
 Work Order: /

Discrepancies

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments
	6061-T6 Alum	40	0	0	40	
	Flat 3/4x3					

Initials of receiver (if shipment OK) Level 12 CP

Production/Admin: 07/04/26
 Date: 07/04/26
 Received/Costing: R/P 4401 + 4417
 Initial: 12

Location: _____

H:\FORMS\Purchasing\approved purch\RECREPORT Rev D

Sub-Total
 G.S.T.

468.
 28.

TOTAL →

496.

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BR/31/05 16:58:41

Fax Server →

416 213 9587 Fax Server

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Novelis Deutschland GmbH, Werk Neustadt
Novelis Automotive, Painted & Specialties
 Stahlwerk Straß 1 Postfach 1945
 D-62623 Neustadt am Main
 Tel.: (03 47 41) 7740
 Fax: (03 47 41) 204
 Email: nov@novelis.de

45295 / 45296 /
 45297 / 278 / 279
 111111
 Novelis

Attestationsbescheinigung
 Inspection Certificate
 Certificat de Reception
 Nr./No. 6135222-9

Standard
 DIN 9139-2-250/11 (1597)

Order No. 4000080363
 Order Date 24.10.05
 Order Qty 15
 Order Price 15.000000
 Order Ref. 15.000000

Chemische Zusammensetzung in Gewichtsprozent
 Chemical composition in percentages by weight
 Chemical elements in percentages by weight

Element	Symbol	Value	Unit
C	C	0,52	%
Mn	Mn	0,34	%
P	P	0,25	%
S	S	0,08	%
Si	Si	0,30	%
Al	Al	0,05	%
Fe	Fe	0,05	%
N	N	0,01	%
O	O	0,01	%
H	H	0,01	%
Cu	Cu	0,01	%
Cr	Cr	0,01	%
Co	Co	0,01	%
Ni	Ni	0,01	%
Mo	Mo	0,01	%
W	W	0,01	%
B	B	0,01	%
As	As	0,01	%
Sb	Sb	0,01	%
Bi	Bi	0,01	%
Pb	Pb	0,01	%
Sn	Sn	0,01	%
Zn	Zn	0,01	%
Ag	Ag	0,01	%
Au	Au	0,01	%
Ir	Ir	0,01	%
Rh	Rh	0,01	%
Pd	Pd	0,01	%
Ce	Ce	0,01	%
La	La	0,01	%
Pr	Pr	0,01	%
Nd	Nd	0,01	%
Sm	Sm	0,01	%
Eu	Eu	0,01	%
Gd	Gd	0,01	%
Tb	Tb	0,01	%
Dy	Dy	0,01	%
Ho	Ho	0,01	%
Er	Er	0,01	%
Tm	Tm	0,01	%
Yb	Yb	0,01	%
Lu	Lu	0,01	%

Mechanische Eigenschaften
 Mechanical properties
 Caractéristiques mécaniques

Item	Material	Approximate Dimensions	Estimated Weight (kg)	Estimated Volume (m³)	Estimated Density (kg/m³)	Estimated Cost (USD)
10	3901306	8222500001	1.49 * 110.41 * 257.59 m	0.000		